INSTALLATION ADJUSTMENT SERVICE

270-4PS-LF

1. Model 270 Parallel Systems are factory pre-assembled and tested and include 4 thermostatic water mixing valves which function as a system to meet both high and low demand for tempered water.

2. System should be installed at a location where it can easily be cleaned, adjusted or repaired.

3. System supplies must be connected as shown (Hot-left, Cold-right) on page 2. Exercise caution when soldering.

4. Flush pipes thoroughly after system has been connected.

5. Assemblies installed on a recirculated hot water system MUST be piped according to LEONARD'S REQUIRED PIPING METHOD W (see page 2).

6. Refer to page 4 of this bulletin for correct Setup Instructions.

Maximum Operating Pressure 125PSI (860 KPA) for Hot and Cold Water.

CAUTION

All thermostatic water-mixing valves have limitations. They will not provide the desired accuracy outside of their flow capacity range. Consult the capacity chart on page 6.
NOTE: Hot inlet must be on left and cold inlet must be installed on right inlet or the unit will not work. See page 4 for set up instructions.
WARNING

These mixing valves are equipped with an adjustable high temperature limit stop which must be set by the installer for each individual valve. If the valves are not set properly the valves when turned to full HOT will deliver water in excess of 110°F (43°C) and the limit stop MUST BE RESET BY THE INSTALLER!

TO RESET ADJUSTABLE HIGH TEMPERATURE LIMIT STOP:

1. Loosen LTR Set Screw
2. Adjust POINTER to maximum desired temperature.
3. Tighten LTR Set Screw
4. Check temperature
5. The new maximum temperature has now been set.

NOTE: LIMIT STOP MUST BE RESET AND RECHECKED EACH TIME HANDLE IS REMOVED.

IMPORTANT! ALL MIXING VALVES MUST BE SET AT THE SAME OPERATING TEMPERATURE.

SEE PAGE 4 FOR SET UP INSTRUCTIONS

SEE PAGE 5 FOR COMPLETE PARTS BREAKDOWN

WARNING

WATER TEMPERATURES IN EXCESS OF 110°F (43°C) MAY CAUSE SCALDING, SEVERE INJURY, OR DEATH!!

REMEMBER! THIS IS A CONTROL DEVICE WHICH MUST BE CLEANED AND MAINTAINED ON A REGULAR BASIS. (SEE MAINTENANCE GUIDE AND RECORD, MGR-1000).
SET UP INSTRUCTIONS

METHOD W SET-UP INSTRUCTIONS

Before any attempt is made to adjust this system, be sure the temperature of the hot water at the source is properly set and maintained.

1. Shut off circulator
2. Close ball valves #2, #3, and #4
3. Open enough fixtures to flow roughly 2 GPM
4. Set mixing valve #1 to the desired temperature
5. Open ball valve #2 and close ball valve #1.
6. Set mixing valve #2 to the desired temperature
7. Continue until all 4 valves are set to same temperature
8. Open all ball valves
9. Shut off all fixtures. Note: At this point, be sure NO water is being drawn through any fixture until the temperature in the recirculated line has been set.

10. Fully open balancing valve #1 (see page 2) and start the circulator. Make sure no water is being drawn.
11. Observe the temperature until it stabilizes.
12. Close balancing valve #1 (see page 2) slightly if the temperature is to hot, and again let the temperature stabilize. Repeat until the desired recirculated temperature is set.
TROUBLESHOOTING INSTRUCTIONS

SYMPTOMS

- Leaking water between valve cover and body  KIT 1/WX  gasket kit
- Leaking water under knob  KIT 1/WX  gasket kit
- Valve will not control temperature after cleaning  KIT R/270/370  rebuild kit
- Hot water by-passes into Cold water  KIT 4/220  check kit
- Cold water by-passes into Hot water  KIT 4/220  check kit

KIT INCLUDED PARTS

- KIT 1/WX  Shuttle o-ring, Stem assembly o-ring, Cover o-ring
- KIT R/270/370  Shuttle o-ring, Stem assembly o-ring, Cover o-ring, Shuttle assembly, Return spring
- KIT 4/220  2 Check valves, 4 Check clips
CAUTION! ALL THERMOSTATIC WATER MIXING VALVES AND SYSTEMS HAVE LIMITATIONS! THEY WILL NOT PROVIDE THE DESIRED PERFORMANCE OUTSIDE OF THEIR FLOW CAPACITY RANGE! CONSULT THE CAPACITY CHART BELOW AND OBSERVE MINIMUM FLOWS SHOWN.

IMPORTANT:
Maximum Operating Pressure: 125 PSI (860 KPA) These thermostatic water mixing valves can be adjusted to deliver water at temperatures exceeding 110°F (43°C). After installation, the installer must check the outlet water temperature and adjust the temperature setting to ensure delivery of a safe water temperature not exceeding 110°F (43°C).

CAUTION! ALL THERMOSTATIC WATER MIXING VALVES AND SYSTEMS HAVE LIMITATIONS! THEY WILL NOT PROVIDE THE DESIRED PERFORMANCE OUTSIDE OF THEIR FLOW CAPACITY RANGE! CONSULT THE CAPACITY CHART BELOW AND OBSERVE MINIMUM FLOWS SHOWN.

FLOW CAPACITIES

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<th>MODEL</th>
<th>IN</th>
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<th>MINIMUM FLOW (GPM)</th>
<th>PRESSURE DROP</th>
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NOTE: Leonard Valve Company reserves the right of product or design modification without notice or obligation.

LIMITED WARRANTY

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